Aralia frodiniana (Araliaceae), a New Species from Indonesia

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ABSTRACT. A new species of Aralia from Sulawesi, Indonesia, A. frodiniana J. Wen, is described and illustrated. The new species belongs to Aralia sect. Dimorphanthus and is similar to A. montana from Java and Sumatra of Indonesia in its short or subsessile petiolules, and the narrowly triangular, dark brownish and glabrous inflorescence bracts with ciliate margins. Aralia frodiniana is distinguished from A. montana by its densely pubescent inflorescence, more pubescent leaves, and thinner leaflets. It differs from A. ferox from Java and Sumatra in its pubescent (vs. glabrescent) leaflets, and densely pubescent (vs. glabrous) inflorescence.

Key words: Aralia, Araliaceae, Indonesia.

Aralia L. (Araliaceae) consists of approximately 65 species distributed in eastern to southeastern Asia and in the Americas from Canada to Argentina, Bolivia, and Peru (Wen, 1993, 2001a). Recent systematic studies of Aralia (Wen, 1994, 2000a, 2000b, 2001a, 2001b; Wen et al., 1998) have led to the discovery of a new species, A. frodiniana, described here from Sulawesi (formerly Celebes), Indonesia. The new species is one of the 27 species of Aralia sect. Dimorphanthus (Miquel) Miquel, which has a disjunct distribution between eastern to southeastern Asia (25 spp.) and eastern North America (2 spp.). A detailed taxonomic account of section Dimorphanthus is provided by Wen (2001b). Aralia frodiniana possesses the synapomorphies of section Dimorphanthus: woody habit, prickly stems, bipinnate to tripinnate leaves, and relatively large pollen tectoral perforations (Wen, 2001b). This taxon is one of only two species of Aralia recorded from Sulawesi, the other being A. merrillii Shang (also belonging to sect. Dimorphanthus), which was treated in Flora Malesiana as A. scandens (Merrill) Ha (Philipson, 1979).

Aralia frodiniana J. Wen, sp. nov. TYPE: Indonesia. Sulawesi: "Celebes en Onderhond. afd. Bonthain, Paring talasa," 18 Apr. 1922, Boschproefstation 5462 (holotype, L). Figure 1.

Frutex erectus, aculeatus. Folia bipinnata; foliolis ovatis, 3–8 cm longis, 2.0–4.5 cm latis, apice acutis vel acuminatis, basi rotundatis vel subcordatis, margine serratis.

Inflorescentia terminalis, pubens, ca. 35 cm longa; umbellis 12- ad 35-floris; pedicellis 5–12 mm longis. Fructus globosus, 3.2–4.1 mm longus, 3.0–3.8 mm latus.

Erect shrubs with prickles on stem. Leaves bipinnate, each pinna subtended by a stipel; petioles with a few conically shaped prickles, pubescent; stipules coriaceous, almost entirely fused with each other at the petiole base, ca. 2 cm long; leaflets ovate, occasionally elliptic, $3-8 \times 2.0-4.5$ cm, acute to acuminate at apex, rounded to occasionally acute or slightly subcordate at base; serrate at margin; coriaceous to thick papery; petiolules 0-1 mm long; adaxial surface dark green, with conspicuous, sunken and somewhat pubescent veins and veinlets; abaxial surface grayish green, densely pubescent; lateral veins 8 or 9; stipels with petiolules 0.8-2.2 cm long. Inflorescence terminal, ca. 35 cm long, densely pubescent, prickles absent, main axis ca. 12 cm long, ca. 15 primary lateral branches forming a large panicle; each $30-35 \times 15-20$ cm, with many (ca. 40) secondary branches; secondary branches with 3 to 10 umbels; umbels 12- to 35flowered; pedicels pilose to pubescent, 5–12 mm long; bracts subtending primary branches narrowly triangular, ca. $15 \times 5-7$ mm, dark brownish, ciliate, glabrous elsewhere; bracteoles lanceolate, 1.7-1.9 × ca. 1 mm, glabrous or only slightly ciliate. Flowers not seen. Fruits globose, $3.2-4.1 \times 3.0-$ 3.8 mm, with persistent sepals and styles; styles connate for 3/4 of their length from the base, divided and recurved above, 2-2.2 mm long. Seeds 5 per fruit.

Distribution. Endemic to the island of Sulawesi, Indonesia.

Phenology. Flowers not recorded, fruiting in April to June.

This species is named in honor of my colleague David Frodin, who has provided much encouragement in my studies of Araliaceae.

Aralia frodiniana is similar to A. montana Blume (sect. Dimorphanthus) from Java and Sumatra (Wen, 2001b) in its short to subsessile petiolules, and its narrowly triangular, dark brownish and glabrous bracts, which may be ciliate along the margin. It is distinguished from A. montana by its densely pu-

Novon 11: 498-500. 2001.

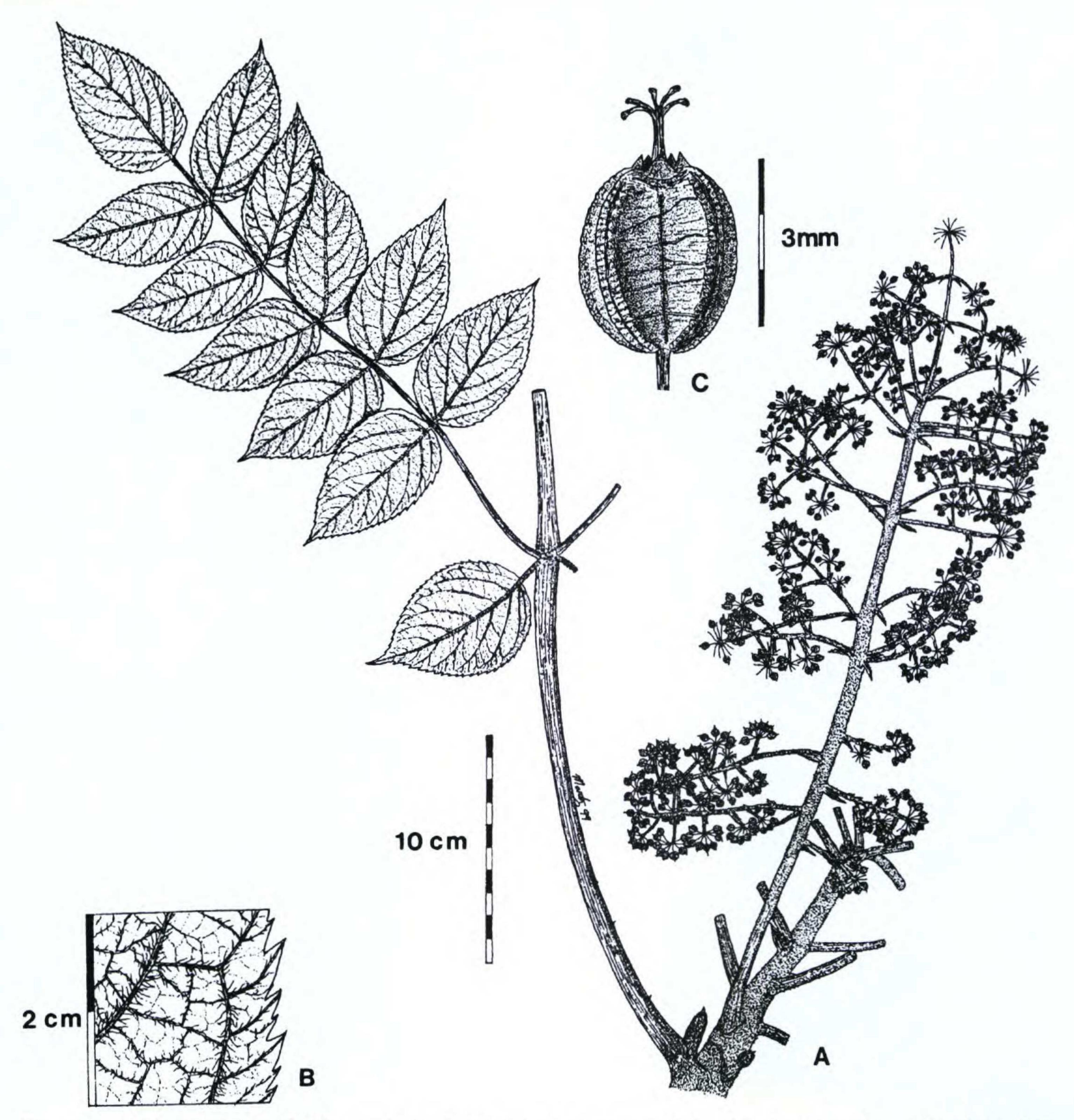


Figure 1. Aralia frodiniana J. Wen. —A. Leaf with infructescence. —B. Leaflet abaxial surface. —C. Fruit. A-C drawn from the type, Boschproefstation 5462.

bescent inflorescence, more pubescent leaves, and thinner leaflets. Aralia frodiniana differs from A. ferox Miquel from Java and Sumatra in having somewhat larger leaflets (3.0–8.0 × 2.0–4.5 cm vs. 2.5–6.5 × 1.2–3.5 cm) that are pubescent (vs. glabrescent or with short bristles on veins and veinlets), and a densely pubescent (vs. glabrous) inflorescence. Aralia merrillii (the only other Aralia species in Sulawesi) is highly distinctive by its scandent or climbing habit, recurved (vs. straight) prickles, mostly glabrous (vs. pubescent) leaflets with long petiolules (3–13 mm), caducous (vs. persistent) bracts, and glabrous (vs. pilose to pubes-

cent) pedicels. For a detailed discussion of taxa in Aralia sect. Dimorphanthus, see Wen (2001b).

Aralia frodiniana is presently only known from two collections (the holotype and the paratype). The conservational status of the species needs to be investigated.

Paratype. INDONESIA. Southwest Sulawesi (Celebes): G. Bonthain, ca. 2600 m, 14 June 1921, Bunnemeijer 12147 (L).

Acknowledgments. I thank Jeff Martz for preparing the illustration, the curators of L for permitting the examination of their specimens, Murray 500 Novon

Henwood, Pete Lowry, an anonymous reviewer, and editor Victoria Hollowell for helpful advice. Financial support was provided by the National Science Foundation (DEB-0196051).

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(In press).